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THE DEVELOPMENT OF RICARDO'S THEORY OF
VALUE.

MODERN discussion of the validity of the economic system of David Ricardo has centred about the theory of value. On the one hand, Jevons's classic attack has been maintained with undiminished vigor by a group of critics among whom the Austrian representatives loom up most conspicuously. On the other hand, Professor Marshall has broken a mighty lance for the essential correctness of the Ricardian theory, and has inspired, in this as in other directions, a distinct reappreciation.

But this doctrinal debate has been waged with such heat that polemic endeavor has in no small degree replaced textual study. Fallacy hunting has been met by generous interpretation, hyper-criticism has been answered by apology, and, in intent concern upon establishing or overthrowing alleged errors, both critics and supporters have relatively neglected Ricardo's original exposition of value and the successive changes which that exposition underwent.

Moreover, students of the Ricardian economics have received by successive publication since 1887 an amount of Ricardo's informal writing hardly less in extent than the aggregate of his formal composition. Such an accession in the case of an economist of indistinct personality, profound thought, and unsystematic exposition could not fail to be productive of important results. The series of letters to Malthus,¹ McCulloch,² and Trower³ respectively, and the privately printed correspondence of his Continental tour,⁴ have not only modified the common estimate of Ricardo's personal character, in acquainting us for the first time with his every-day activity, but have corrected glaring misconceptions of certain of his fundamental doctrines. Even more notable than this, they have made it possible to follow the course of Ricardo's mental history as an economist, and to study with some exactness the evolution of his most characteristic theories. Something of this has already been done, but most of it still awaits cautious and precise interpretation.

To trace in such spirit the origin and development of the theory of value in Ricardo's thought and writing, both as a basis for future critical estimate and as an episode in the history of economic thought, is the purpose of the following pages.

I.

There are three clearly defined phases in Ricardo's treatment of value, corresponding here as throughout to the influences which shaped his mental history as an economist. The first began with his acquaintance with syste-

¹ *Letters of David Ricardo to Thomas Robert Malthus, 1810-1823* (ed. Bonar, Oxford, 1887).

² *Letters of David Ricardo to John Ramsay McCulloch, 1816-1823* (ed. Hollander, New York, 1895).

³ *Letters of David Ricardo to Hutches Trower and Others, 1811-1823* (ed. Bonar and Hollander, Oxford, 1899).

⁴ *Letters written by David Ricardo during a Tour on the Continent* (privately printed, Gloucester, 1891).

matic economic writing and extended through the bullion controversy, and might be described as a consistent exposition of Adam Smith's original concept of value. The second phase was incident to the corn-law discussions and to the debated policies associated therewith, and found expression in the chapter on value in the first edition of the *Principles of Political Economy and Taxation*. Its keynote was theoretical warrant for the propositions that higher wages did not necessarily mean higher prices, and that a fall in wages was compatible with a rise in prices. The third phase consisted, in the main, of spirited controversy with friends and critics as to the adequacy of labor as a measure of value, and was still in progress at the time of Ricardo's death.

In inception, Ricardo's theory of value probably dated back to early critical reading of the *Wealth of Nations*. It took definite shape in correction of Adam Smith's exposition, and further analyses proceeded for a decade strictly within these lines. An acute student of the Ricardian economics has said that "we are indebted to the Bullion controversy for the Ricardian theory of value."¹ But this can be true only in the most general sense. The subject had become fairly clear in Ricardo's mind long before 1809; and the effect of subsequent currency controversies—such as that growing out of Bosanquet's assertion that years of scarcity and high taxation, and not excessive circulation, were responsible for the rise in prices—was, at most, clearer definition and further application of a theory of value and price then already well in mind rather than independent formulation of a new theory.²

¹ Cannan, *A History of the Theories of Production and Distribution in English Political Economy from 1776 to 1848* (London, 1893), p. 388.

² See Ricardo, *Reply to Mr. Bosanquet's Practical Observations on the Report of the Bullion Committee* (London, 1811), chap. viii.; in *Works* (ed. McCulloch), pp. 354-359; cf. also Bosanquet, *Practical Observations on the Report of the Bullion Committee* (second edition, corrected, London, 1810), p. 92 et seq.

Ricardo's concept of value, in its first or Smithian phase, was on the verge of change in 1815. Moreover, in *An Essay on the Influence of a Low Price of Corn on the Profits of Stock*, published in that year, the theory of value figured far less as a novel or basic doctrine, requiring explicit assertion or detailed exposition, than as a restatement of a familiar principle cited merely to establish the proposition that with the progress of wealth the landlord might be expected to benefit not only "by obtaining an increased quantity of the produce of the land, but also by the increased exchangeable value of that quantity."¹

But even from this more or less indirect and partial exposition it is not difficult to reconstruct the theory of value which we may conceive as attained by Ricardo in critical study of the *Wealth of Nations*, and as asserted by him thereafter in argument and correspondence until the economic controversies of 1813-17 gave an effective impulse in another direction.²

Starting from Adam Smith's recognition—in itself at least as old as Aristotle—of the two different meanings attaching to the word "value" (namely, value in use and value in exchange), Ricardo pursued the course then already made familiar by successive expositors. Value in use is utility. Utility, associated with scarcity and necessary expenditure of labor, confers value in exchange, with which alone economic analysis is concerned. Of the three attributes of exchange value, utility, although always an "absolutely essential"³ condition, is insufficient as the basis of exchange relations. On the other hand, the sec-

¹*An Essay on the Influence of a Low Price of Corn on the Profits of Stock*, in *Works* (ed. McCulloch), p. 377.

²The nearest approach to an exposition of this first phase of Ricardo's treatment of value to be found in his own writings is represented by pages 1-15 of chapter i., "On Value," in the first edition (1817) of the *Principles*. The chapter as published was undoubtedly composed at different times and under the dominance of different ideas, and it is not entirely fanciful to regard either the formal break (omitted after the first edition) on page 12, or the end of the second paragraph on page 15, as the line of stratification.

³*Principles* (1817), p. 2.

ond attribute, scarcity,—relative to “the varying wealth and inclinations”¹ of prospective purchasers,—is the sole determinant of the value of the limited number of commodities whose quantity cannot be increased by labor.

It is not, however, with this bare handful of scarcity goods, but with the great mass of freely produced, competitively exchanged commodities, such as can be increased in quantity by the exertion of human industry, and on the production of which competition operates without restraint, that Ricardo's, like Smith's, further discussion “of commodities, of their exchangeable value, and of the laws which regulate their relative prices,”² is associated.

At the basis of exchangeable or relative value lies the concept of positive or absolute value. Possessing utility and scarcity, commodities are valuable in themselves, in proportion to the capital employed and the labor expended in their production.³ Positive value is thus the same as cost of production, consisting of wages of labor and profits of stock.⁴

But the subject of inquiry is not the value of a commodity in itself, but in its relation to other commodities. Positive values must thus be compared and measured. The positive value of a commodity reduced to commensurable form for the determination of relative equivalences constitutes its exchangeable or relative value.⁵

¹ *Principles* (1817), p. 3.

² *Ibid.*, p. 3.

³ “I do not, I think, say that the labour expended on a commodity is a measure of its exchangeable value, but of its positive value. I then add that exchangeable value is regulated by positive value and therefore is regulated by the quantity of labour expended.” *Letters of Ricardo to Trower*, p. 151; cf. *ibid.*, p. 162.

⁴ “Mr. Malthus appears to think that it is a part of my doctrine, that the cost and value of a thing should be the same;—it is, if he means by cost, ‘cost of production’ including profits.” *Principles* (1821), p. 46, note; cf. *ibid.*, p. 107; also *Essay on Influence of Low Price of Corn*, in *Works*, p. 377, note; and, finally, Malthus, *Measure of Value*, p. 4.

⁵ Cf. the question discussed at the meeting of the Political Economy Club on January 5, 1824, with Torrens in the chair and with Malthus, Tooke, Mushet, James Mill, Senior, Warburton, and Grote among those in attendance: “In what does the circumstance which determines Exchangeable

Up to this point there is little, if anything, to distinguish Ricardo's thought from Adam Smith's exposition. In stating it, Ricardo would probably have slipped more easily than Smith into the loose habit of speaking of labor expenditure as a cause—indeed, the sole cause—of exchangeable value,—“the original source of exchangeable value.”¹ But this was as far from Ricardo's real meaning as it was from Smith's. On the other hand, Ricardo was even less concerned than Smith with the value of a commodity in itself,—that is, with its intrinsic significance to its possessor,—but, exclusively, with the several amounts of other commodities which it might secure in exchange. His interest thus lay not with positive, but with relative value, and consequently less with the cause than with the measure of exchange value.

Adam Smith had asserted that in “that early and rude state of society which precedes both the accumulation of stock and the appropriation of land”² commodities exchange in proportion to the quantities of labor expended in acquiring them. But even in the economic world which Adam Smith saw about him such a measure of exchange value was clearly unworkable. Few, if any, commodities were the product of labor alone. Land, labor, and capital co-operated in production, and the great mass of goods embodied the association in various proportions of these three factors. Such composites could clearly not be estimated in terms of a single unit. A product embodying *a*, land, and *b*, labor, and *c*, capital, was incommensurable, in the manner proposed, with respect to a commodity to which *c*, land, and *a*, labor, and *b*, capital, contributed.

Adam Smith met, or failed to meet, this difficulty by unconsciously or tacitly substituting—in Professor Wieser's

Value differ from the measure of it?” *Minutes of Proceedings, 1821-82*, vol. iv. p. 60.

¹ *Principles* (1817), p. 5.

² *Wealth of Nations*, Book I. chap. vi. (ed. Rogers, vol. i. p. 49).

phrases¹—an “empirical” for the earlier “philosophical” measure of value. He asserted that in ordinary industrial intercourse—that is, as soon as capital had been accumulated and a rent paid for land—relative exchange values were determined by the respective amounts of labor which the several commodities would command instead of by the several amounts necessary for their respective production. Such a substitution involved, up to a certain point, no logical fallacy, or was possible at no greater cost than the sacrifice of doctrinal continuity. In so far as goods are the product of labor alone and that labor remains constant,² the circumstance that commodity A exchanges, over any considerable period, for commodity B, makes it possible to assert that the value of each is measured either (a) by the amount of labor involved in its production or (b) by the amount of labor which possession of the commodity will command. Under such conditions the producer may be expected to receive for his product an amount of labor equivalent to that embodied therein, and either unit of measurement is applicable.

But the identity is no longer visible when production has become capitalistic, and interest and, with Adam Smith, rent enter into cost of production, co-ordinate with wages. The first mode of measurement is now distinctly inadequate. Dependent upon it alone, the values of bread produced by labor alone, of shoes produced by labor associated with capital, and of cloth to which labor, capital, and land have contributed, are incommensurable. On the other hand, the second unit of measurement is workable. Such commodities can be compared with regard to the respective amounts of labor which they will command, even though their several costs of production cannot be reduced to terms of labor. Thus by a manner

¹ Wieser, *Natural Value*, xxvii-xxviii.

² An assumption which Ricardo was unwilling to concede. Cf. *Principles* (1817), p. 6.

of empirical parallelism a "labour commanded" unit replaced a "labour embodied" unit, and became the characteristic feature of Adam Smith's theory of value.¹

The transition once effected, Smith undertook to find further and distinctive warrant for "commanded labour"² as "the only universal as well as the only accurate measure of value, or the only standard by which we can compare the value of different commodities at all times and at all places."³ But this contention, although far more prominent in exposition, was distinctly subordinate in theoretical importance, and offered an easy target for critical attack.

The logical consistency of Ricardo's thought resented Adam Smith's empiricism. Short work was made of the claim that "commanded labour" formed an absolutely accurate standard of value. From none of the sources of fluctuation which disqualified—as Adam Smith himself had clearly shown—gold or silver from serving as an invariable standard were the proposed substitutes free.⁴

But Ricardo's prime dissent was more fundamental. That a particular unit of measurement should be adequate for determining the exchangeable value of commodities in primitive industrial conditions, but must be abandoned after the accumulation of capital and the appropriation of land had shaped economic production, seemed to Ricardo's mind negligent and fallacious rea-

¹ It is likely that an identical train of thought induced Malthus in his *Political Economy* (1820) to incline, although not completely to assent, to "the quantity of labour which a commodity will command" as a measure of value rather than "the quantity it has cost," and even more in his *Measure of Value* (1823) to urge Adam Smith's "labour commanded" unit as a measure of value in preference to Ricardo's "labour embodied" unit, or even to his own earlier "mean between corn and labour." It is characteristic that the transition which Adam Smith merely suggests, Malthus describes with naïve explicitness. Cf. his *Political Economy*, p. 124, and his *Measure of Value*, pp. 15, 16. This subject is treated incidentally, but with much originality and acuteness, by Professor Patten in his *Theory of Dynamic Economics* (1892), chap. vi.

² Represented, practically, by corn for long and by silver for short periods.

³ *Wealth of Nations*, Book I. chap. v. (ed. Rogers, vol. i. p. 38.)

⁴ *Principles* (1817), pp. 7-11.

soning. The employment of capital and land as production goods might qualify the original simplicity and universality of the labor measure, and even compel the recognition of particular categories as exceptional. But this was very different from throwing over the entire theory, and comparable rather to that slight modification of the labor theory—recognized by Adam Smith and confirmed by Ricardo—whereby differences in the quality of labor were adjusted by the higgling and bargaining of the market according to “that sort of rough equality which, though not exact, is sufficient for carrying on the business of common life.”¹

Probably even at this period Ricardo would have admitted that we have no knowledge of any one commodity “which now and at all times required precisely the same quantity of labour to produce it,” and that a perfect standard of value was therefore unobtainable. Yet he would doubtless have added then, as he did a few years later, that, if we undertake to ascertain what are “the essential qualities of a standard,” and to study “the causes of the variation in the relative value of commodities” and “the degree in which they are likely to operate,” we shall find that “under many circumstances” . . . “the quantity of labour bestowed on a commodity” is “an invariable standard, indicating correctly the variations of other things.”²

At this point Ricardo paused. Not yet prodded by James Mill to written exposition nor even impelled by current rebate to consecutive statement, he remained mentally content with the general outline of Adam Smith's concept of value. But this acquiescence was emphatically subject to the reservation, conceived with much of the precision and maintained with all of the vigor that distinguished Ricardo's doctrinal thought, that Adam Smith

¹ *Wealth of Nations*, Book I. chap. x. (ed. Rogers, vol. i. p. 32).

² *Principles* (1817), pp. 6, 7, 11, 12.

had erred in abandoning his original measure of value,—namely, “embodied labour,”—and that the same principles determined exchange relations in advanced industrial conditions that prevailed in “that early and rude state of society” which preceded the use of capital and the appropriation of land.

II.

The second phase of Ricardo's treatment of value is directly traceable to the corn-law controversies of 1813–17 and to active discussions thereafter with Malthus, McCulloch, Say, and Torrens as to correlated economic policies. The initial chapter “On Value” in the first edition (1817) of the *Principles* was thus designed less as an independent exposition than as theoretical warrant for certain practical propositions advanced and defended by Ricardo from about 1813 on. Thus (a) Ricardo believed, in opposition to Malthus, that lower profits could only result, in the long run, from higher wages; (b) he asserted that McCulloch's proposal to scale down the interest on the national debt was neither just nor equitable; and (c) he refused all credence to the popular fear that the free importation of corn would be followed by a further disastrous fall in general prices.

It was to give re-enforcement to such definite propositions that Ricardo developed and extended his original concept of value. The prime features of his modified exposition were disagreement with the doctrine that every rise in wages must necessarily be transferred to the price of commodities, and, second, demonstration of the converse dictum, that higher wages were actually compatible with lower prices.

The extent to which this doctrinal development was an incident of the practical controversies noted above will

appear more clearly if the precise points at issue be considered in some greater detail:—

(a) The agricultural unrest in England in 1813 and the parliamentary discussions that accompanied it could not fail to attract Ricardo's attention. In the early part of 1814 his controversial correspondence and discussions with Malthus passed from the "old question"¹ of the influence of the currency upon the foreign exchanges to the more immediate problem of the effect of corn duties upon wages, prices, profits, and rent.²

Either because it was "the simple belief, common enough among the commercial class of his time,"³ or, more probably, because it was in essence a legitimate heritage from Adam Smith, Ricardo's position from the outset seems to have been clear and definite: restrictions on imports mean a higher price of corn, the increased price of food causes a rise in wages, higher wages are attended by lower profits and interest, and "it is the profits of the farmer which regulate the profits of all other trades."⁴

The controversy appears to have begun with Malthus's denial that the last proposition, that agricultural profits determine general profits, was any more true than its converse, and consequently that a cheaper method of obtaining food was not the only means of raising profits. Thus a new foreign market, giving a greater demand and higher prices for domestic wares, would mean higher gain in particular trades, higher interest in general, and ultimately higher profits in agriculture.⁵

¹ *Letters of Ricardo to Malthus*, p. 25.

² A gap in the Ricardo-Malthus correspondence from January 1 to June 26, 1814, renders it impossible to determine the precise date and occasion of this noteworthy discussion. As early as March 8, 1814, it was well under way; for at that time the differences had apparently been committed to writing, and were read by Hutches Trower. Cf. *Letters of Ricardo to Trower*, p. 4. It is probable that Malthus's *Observations on the Effects of the Corn Laws*, published "in the spring of 1814," was a consequence rather than a cause of the original discussion.

³ Cannan, *History of the Theories of Production and Distribution* (1893), p. 164.

⁴ *Letters of Ricardo to Trower*, pp. 5, 6.

⁵ *Ibid.*, p. 5.

Gradually the point at issue took more definite shape. In August, 1814, it was the "effects which must *necessarily* follow from restrictions on the importation of foreign corn."¹ A few months later Ricardo believed facility of obtaining food to be "almost the sole cause," while Malthus admitted that it "may be safely said to be the main cause" of high profits.² Before the appearance of Ricardo's *Essay on the Influence of a Low Price of Corn on the Profits of Stock* in 1815, the difference had resolved itself into Ricardo's claim that restrictions on the importation of corn were the invariable, permanent cause of low profits, and Malthus's denial that this consequence was either necessary or peculiar.

With the greater precision of thought brought by this controversy, and even more by Malthus's explanation of the cause and nature of rent, a few months later Ricardo appears to have become aware of a vulnerable point in his theory of the inverse relation between wages and profits. It was impossible to prove that a rise in wages was the exclusive cause of a fall in profits, if it were true that a rise in wages necessarily occasioned a rise in prices. Were the latter the case, the manufacturer simply recouped himself from out of the higher prices of his product for the higher wages he was obliged to pay, and profits remained unchanged. Thus the validity of Ricardo's theory of profits became, in large measure, dependent upon his ability to prove that prices did not necessarily increase as wages rose.³

(b) The occasion of Ricardo's acquaintance with McCulloch was assertion and defence of the proposition that a rise in the price of corn did not involve a rise in general prices.

¹ *Letters of Ricardo to Malthus*, p. 38.

² *Ibid.*, p. 46.

³ Eventually, Ricardo undertook to show that profits would fall when wages rose, even though general prices also rose. Cf. *Principles* (1817), p. 144. But in all likelihood this was an after-thought or certainly an incident of a further analysis of the interrelation of wages and profits.

In the spring of 1816 McCulloch published and sent to Ricardo, with whom he had had no prior intercourse, his *Essay on a Reduction of the Interest of the National Debt*, in which he urged a forcible reduction of the interest on the national debt conformable to the reduced value of corn. The reduction was to be made "in a ratio compounded of the price of corn when the loan was made, of the reduced price of corn, and of the effect of the fall in the price of corn on manufactures." It thus involved a deduction of 40 per cent. from the interest on loans from 1808 to 1813, and of $25\frac{5}{6}$ per cent. upon those made thereafter.¹

Ricardo in reply expressed disagreement with the necessity of adopting so violent a remedy. Such a measure might be beneficial to one class at the expense of another, yet it would afford very little relief to the country, and would be a precedent of a most alarming and dangerous nature. There had been both a fall in the value of the precious metals and a rise in the value of paper, but it was surely impracticable to legislate for every alteration in the value of currency. The existing distress arose in large part from a fall in the value of raw produce, totally independent of any variation in the value of money. It was confined to raw produce alone, and was temporary in duration and limited in effect.²

Apparently stimulated by the criticism, McCulloch expanded his pamphlet of fifty-three pages into an octavo volume of some two hundred pages, and sent a copy with an accompanying letter to Ricardo in the closing months of 1816.³ The views of the larger work were described in the Prefatory Note as "fundamentally the same" as those contained in the earlier pamphlet, the writer endeavoring to prove that "a great portion of the paper

¹ *Letters of Ricardo to McCulloch*, p. 1.

² *Ibid.*, p. 2.

³ *Ibid.*, pp. 3-9. As there stated, a tell-tale footnote referring to this volume, and contained in each of the three editions of the *Principles*, was coolly omitted by McCulloch from his edition of Ricardo's *Works*.

lent to Government during the late war was *depreciated*, and that if the stockholders are now paid the same nominal sums they lent, with *undepreciated* paper, they will get an undue advantage at the expense and ruin of the productive classes." McCulloch accordingly advocated the propriety of repealing the Restriction Act and of obliging the Bank to resume cash payments, but urged the inexpediency of such a measure unless accompanied by a reduction of the interest of the national debt, to counteract the effects of the bank restriction and of the corn laws.

Ricardo's response was lengthy and detailed; but the general tenor of his dissent was, if anything, more pronounced. He pointed out that McCulloch's proposal was based upon the assumption that neither gold nor silver was the standard by which bank notes should be regulated, but wheat; and, if adopted, the dividend on the national debt must be readjusted by the price of wheat every year or every ten years. Then, pressing his analysis, Ricardo summed up: "Your system proceeds upon the supposition that the price of corn regulates the price of all other things, and that when corn rises or falls, commodities also rise or fall,—but this I hold to be an erroneous system, although you have great authorities in your favor, no less than Adam Smith, Mr. Malthus, and M. Say."¹

In how far Ricardo had at this later time of writing already reached the conclusion that a rise in the price of corn and in the rate of wages was not necessarily accompanied by a rise in general prices cannot be determined. It seems, however, reasonably clear that the discussion with McCulloch, centring as it did about a point on which Ricardo's views were most pronounced, should again have convinced him of the importance of completely refuting the fundamental assumption upon which McCulloch's proposal rested,—that general prices were regulated by the price of corn or the rate of wages.

¹ *Letters of Ricardo to McCulloch*, p. 6.

(c) A final impulse to disprove the proposition that lower wages were the cause of a fall in prices came to Ricardo from a third direction. General apprehension was felt throughout the country that the removal of restrictions on the importation of grain would be followed by a disastrous fall in general prices. Thus in the *Grounds of an Opinion on the Policy of Restricting the Importation of Foreign Corn* (1815) Malthus called attention to the "considerable check to industry" which the fall in general prices incident to the return to specie payments must occasion, and then cautioned, "it certainly does not seem a well-chosen time for the legislature to occasion another fall still greater, by departing at once from a system of restrictions."¹ Similarly, in another passage, Malthus pointed out how the great majority of "the class of persons living on the profits of stock" will in such event "feel very widely and severely the diminution of their nominal capital by the fall of prices."² So wide-spread was this impression and so animated the discussion that it excited that, writing in 1824, McCulloch could say, "the discussions respecting the policy of restrictions on the corn trade, and the causes of the heavy fall of prices which took place subsequently to the late peace, by inciting some of the ablest men that this country has ever produced to investigate the laws regulating the price of raw produce, the rent of land, and the rate of profit, have elicited many most important and universally applicable principles."³

On the one hand believing firmly, as he did, in the desirability of free trade in corn, and on the other hand recognizing the serious effect of falling prices, it was inevitable that Ricardo should have undertaken to prove that there was no necessary connection between the two phenomena.

¹ *Grounds of an Opinion*, pp. 9, 10.

² *Ibid.*, p. 32.

³ *A Discourse on the Rise, Progress, Peculiar Objects, and Importance of Political Economy* (1824), pp. 64, 65.

Thus impelled from three distinct quarters, it is not surprising that an urgent concern of Ricardo from the publication of the *Essay on the Influence of a Low Price of Corn* in 1815 to the appearance of the *Principles* in 1817 should have been disproof of the dictum that high wages necessarily meant high prices.

But no principle in the then existing body of economic thought was more firmly intrenched than this 'received doctrine'¹ which Ricardo proposed to assail; while the theory which he urged in substitution could at best be described as possessing "the disadvantage of novelty" and opposed by "writers of distinguished and deserved reputation."²

The whole trend of Adam Smith's reasoning had been to prove that a rise in the price of corn is immediately followed by a proportionate rise in the price of labor and of all other commodities.³ Malthus had early declared that "the money price of corn, in a particular country, is undoubtedly by far the most-powerful ingredient in regulating the price of labour, and of all other commodities," even though "it is not the sole ingredient."⁴ Say had asserted, "Si le prix du blé augmente, il [un chef d'entreprise, fermier, manufacturier ou négociant] est obligé

¹ Cf. *Principles* (1817), p. 39.

² *Ibid.* (1817), p. 42. McCulloch declared, "Nothing in the whole science of political economy was reckoned better established, than that a rise or a fall of the rate of wages was attended by a proportionable increase or diminution of the price of commodities." *Edinburgh Review*, June, 1818, p. 68.

³ *Wealth of Nations*, Book IV. chap. v. (ed. Rogers, vol. ii. p. 84). Cf. Malthus, *Observations on the Effects of the Corn Laws* (3d edition, 1815), p. 11.

⁴ *An Essay on the Principle of Population* (2d edition, 1803), p. 458. Similarly, in the *Observations on the Effects of the Corn Laws*, Malthus stated (p. 11), "The rise in the price of corn would have been immediately followed by a proportionate rise in the price of labour, and of all other commodities." It is true that in the same tract Malthus added (p. 15), "Nothing then can be more evident both from theory and experience, than that the price of corn does not immediately and generally regulate the prices of labour and all other commodities"; but it is very clear that Malthus is here speaking of the immediate and invariable effect, and not of the ultimate and general tendency, and that his belief was that general prices ordinarily rose in consequence of a rise in wages, even though not in exact proportion to a rise in the price of corn.

d'augmenter, dans la même proportion, le prix de ses produits."¹ Torrens had shown in detail that "A rise in the price of corn raises the price of labour, and the rise in labour is communicated to all commodities, both those which it immediately produces, and those to which these are employed as the equivalents."² McCulloch, as we have seen, was so firmly convinced that the price of corn regulates the price of all other things, and that, when corn rises or falls, commodities also rise or fall, that he based upon it his proposal to scale down the interest on the national debt, and had invited Ricardo's assent thereto. Even Ricardo himself had in 1814 written to Malthus that "the prices of all commodities must increase if the price of corn be increased,"³ and a little later had referred to "the increased value to which all goods would rise in consequence of the rise of the wages of labour."⁴

By the beginning of 1816 we may conceive Ricardo as fully realizing the importance of the particular point at issue, and as bringing to the task of doctrinal readjustment the best thought of which he was capable. With characteristic profundity he seems to have realized that the sure way to this result was by re-analysis of the theory of value, and to a re-examination of this theory he proceeded to devote himself.

In February, 1816, he wrote to Malthus: "I have not thought much on our old subject; my difficulty is in so presenting it to the minds of others as to make them fall into the same chain of thinking as myself. If I could overcome the obstacles in the way of giving a clear insight into the original law of relative or exchangeable value, I should have gained half the battle."⁵ By Octo-

¹ *Traité d'économie politique* (1803), tome 1, p. 294. In 1819 Ricardo could still speak of "M. Say being impressed with the opinion that the price of commodities is regulated by the price of labour." *Principles* (1819), p. 57, note.

² *An Essay on the External Corn Trade* (1815), p. 88.

³ *Letters of Ricardo to Malthus*, p. 37.

⁴ *Ibid.*, p. 39.

⁵ *Ibid.*, p. 111.

ber of the same year (1816) definite progress had been made: "I have been very much impeded by the question of price and value, my former ideas on those points not being correct. My present view may be equally faulty, for it leads to conclusions at variance with all my preconceived opinions. I shall continue to work, if only for my own satisfaction, till I have given my theory a consistent form."¹

The "consistent form" was attained in the first edition of the *Principles*, published in the spring of 1817.² The keynote of the initial chapter "On Value" was, as has already been said, far less any explicit statement or detailed exposition of the general theory of value than—going even beyond what was required—demonstration of "the compatibility of a rise of wages, with a fall of prices."³

Ricardo's starting-point was the familiar postulate that, as long as the relative values of commodities were measured by "embodied labour," only an increase in the amount of labor necessary to produce them could augment their value, and only a decrease would lower it. A general rise or fall in wages caused no change in prices. If "embodied labour" could thus be established as a universal measure of value, Ricardo's purpose, to prove that prices did not necessarily rise or fall as wages rose or fall, was attained.

But Adam Smith, "and with him"—added McCulloch—"every other political economist down to Mr. Ricardo,"⁴ had asserted that the circumstances which determined relative values "in a rude state of society"—namely, "embodied labour"—were altered when capital and land fig-

¹ *Letters of Ricardo to Malthus*, p. 120.

² It was, doubtless, consciousness of his own mental experience that inspired the statement, in an early paragraph (p. 5), "from no source do so many errors, and so much difference of opinion in that science [political economy] proceed, as from the vague ideas, which are attached to the word value."

³ *Principles* (1817), p. 42.

⁴ *Edinburgh Review* (June, 1818), pp. 63, 64.

ured in economic production. Thereafter relative values were no longer measured solely by "embodied labour." Profits and rent entered as component parts into price, and the real prices of commodities were increased or diminished by every corresponding change in the ordinary rate of profits, the rate of wages and the rent of land.

We have seen that dissent from Adam Smith's abandonment of a "philosophical" for an "empirical" measure of value was a characteristic of the first phase of Ricardo's treatment of value. But this was, at best, the desire of a rigidly logical mind to rectify what appeared to be an illogical and unwarranted lapse. With the controversies of 1815-16 a much greater stake became the issue. It required no profound analysis to make it clear that, if the use of capital and land affected relative values in the manner Adam Smith and his successors had described, then Ricardo's several contentions were without theoretical warrant. Naturally enough, therefore, the formal purpose of the chapter "On Value" in the *Principles* became "to determine how far the effects which are avowedly produced on the exchangeable value of commodities, by the comparative quantity of labour bestowed on their production, are modified or altered by the accumulation of capital and the payment of rent."¹

Of the two circumstances, the effect of rent payment received but brief attention, and that only, it may be suspected, to provide some logical introduction for the following chapter "On Rent."¹ Whatever further significance it possessed lay in the opportunity it afforded Ricardo to broaden the principle of "embodied labour" as a measure of value, so as to refer to that portion of the supply produced under the most favorable circumstances. This interval once bridged, he easily dismissed the matter.²

¹ *Principles* (1817), p. 16.

² "Adam Smith, therefore, cannot be correct in supposing that the original rule which regulated the exchangeable value of commodities, namely the

The relation of profits to the law of value was Ricardo's real concern. Two commodities respectively produced by different amounts of labor conjoined with identical amounts of capital exchanged—like commodities produced by labor alone—in proportion to “embodied labour.” Even if the capitals engaged were different in amount, but identical in durability and in apportionment between fixed and circulating capital, the two commodities would exchange in proportion to the total quantity of labor respectively necessary to manufacture them and bring them to market, including in the term “total quantity” both the labor necessary to the manufacture of the commodity itself and that necessary to the formation of the capital by the aid of which it was produced. No alteration in the wages of labor nor in the profits of capital could effect any alteration in the relative value of such commodities. Nor, since the money in which they were valued was by supposition of an invariable value, could there be any alteration in the prices of such commodities.

But the situation was otherwise, if the several commodities were produced with the aid of different proportions of fixed and circulating capital, or if the quotas of fixed capitals so employed were of different durability. In proportion, Ricardo explained, as circulating capital preponderated in a manufacture or in proportion to the less durability of its fixed capital and its approach to the nature of circulating capital, any increase in wages resulted in a rise in the value of such commodities relative to the value of other commodities produced with the aid of less circulat-

comparative quantity of labour by which they were produced, can be at all altered by the appropriation of land and the payment of rent. Raw material enters into the composition of most commodities, but the value of that raw material as well as corn, is regulated by the productiveness of the portion last employed on the land, and paying no rent.” *Principles* (1817), p. 67. In this particular Professor Gonner's interpretation (Introductory Essay, p. xxxiii, to his edition of Ricardo's *Principles*) is, I think, more accurate than Professor Patten's, “The Interpretation of Ricardo,” in *Quarterly Journal of Economics*, April, 1893.

ing capital or more durable fixed capital. The relative values and, assuming an invariable money standard, the prices of all such commodities were inversely affected by every alteration in wages, and directly by every alteration in profits.

The phenomena introduced into exchange relations by the employment of capitals of unlike quality—responsible for the logical break in Adam Smith's treatment of value, and glossed over, although not by any means neglected, in the first phase of Ricardo's thought—were thus clearly recognized by Ricardo, in his second phase, as exceptions to the universal applicability and rigid accuracy of "embodied labour" as a measure of value.

That this qualification should have been explicitly developed and so cheerfully acquiesced in by Ricardo was due to the fact that it afforded, if anything, superabundant proof of the particular doctrine which he was seeking primarily to establish: the absence of direct variation between wages and values. In so far as "embodied labour" prevailed as a measure of value,—money being supposed, as throughout, to be of an invariable value—a rise in wages obviously involved no increase in values or prices. But, in so far as the employment of capitals of different quality modified the applicability of "embodied labour" as a unit of value, a rise in wages resulted in an actual fall in values and prices. Ricardo was, above all things, fond of a paradox-like dictum; and the close reader will detect almost a note of elation in the closing paragraph of his chapter "On Value": "It appears, too, that commodities may be lowered in value in consequence of a real rise of wages; but they never can be raised from that cause. On the other hand, they may rise from a fall of wages, as they then lose the peculiar advantage of production, which wages afforded them."¹

¹ *Principles* (1817), p. 48.

III.

Ricardo's *Principles of Political Economy and Taxation* was published in the spring of 1817. We have seen that the treatment of value therein contained was designed less as an independent exposition than as a warrant for the proposition that higher wages do not necessarily mean higher prices. But, just as in the case of Malthus's first statement of "the principle of population," it was less the conclusion than the argument which was assailed. Ricardo found himself called upon not to establish any such novel proposition as that prices sometimes fell as wages rose, but more fundamentally to vindicate "embodied labour" as the soundest theoretical and the best practical measure of value.

This controversy, which constitutes the third phase of Ricardo's theory of value, appears to have begun with the appearance of McCulloch's highly laudatory notice of Ricardo's book in the *Edinburgh Review* for June, 1818. Six months earlier McCulloch, writing in the *Scotsman*, had defended certain of Ricardo's doctrines from a violent attack in the *British Review*.¹ But the ampler space of the quarterly first enabled him to present "an accurate exposition of the nature, as well of those general principles which Mr. Ricardo has been the first to ascertain, as of those which he has adopted from late writers, and combined with the others into one harmonious, consistent, and beautiful system."² Disproportionate in plan, marred by occasional inaccuracy and artificial simplicity, the review was nevertheless characterized by all of the intelligibleness and definiteness of McCulloch's expository writing. It is still to be read with profit by the troubled student of the Ricardian economics, while for the period in which and

¹ *Letters of Ricardo to Malthus*, pp. 145, 146.

² *Edinburgh Review*, June, 1818, p. 87.

the circles for whom it was written it was nothing short of a boon. Ricardo's gratification was pronounced. "My own doctrines"—he wrote in acknowledgment to McCulloch—"appear doubly convincing as explained by your able pen, and I have already heard in this retreat [Gatcomb Park] that those who could not understand *me*, most clearly comprehended *you*."¹ Even James Mill regarded it as "a masterly essay on the science, [and one that] will very much assist to disseminate correct views on a very intricate part of it."²

The theory of value and the use of "embodied labour" as its measure figured as the starting-point of McCulloch's exposition. Thereafter the propositions that the accumulation of capital and the payment of rent have no effect whatever in increasing the real price of commodities, and that a rise of wages is never followed by an increase of prices, were developed and stated with a precise absoluteness that could not fail to challenge rejoinder from those who were already on the verge of dissent.

The first serious protest came from Torrens in his "Strictures on Mr. Ricardo's Doctrine respecting Exchangeable Value," in the *Edinburgh Magazine and Literary Miscellany* of October, 1818. Some time before, Ricardo and Torrens had had "a long conversation on this question, without convincing each other";³ but the public criticism clarified the issue, and compelled attention.

Adam Smith had been careful, Torrens stated, to limit the principle that the quantity of labor measures value to the first and rude state of society; and Ricardo, in going further, had gone wrong. Ricardo admitted that the principle which he had asserted would not hold of capitals possessing unequal degrees of durability, but said

¹ *Letters of Ricardo to McCulloch*, p. 10.

² *Ibid.*, p. 11.

³ *Letters of Ricardo to McCulloch*, p. 14. For the consequence of the discussion, cf. p. 480 below. In another place the present writer hopes to consider the doctrinal relations in general of Ricardo and Torrens.

they were exceptional cases. They were not the exceptional, but the common cases, replied Torrens, and therefore Ricardo's principles were entirely subverted by them. Even when the capitals possessed equal durability, the labor which they put in motion might be different and unequal; but competition would still bring the value of the products to the same point. Hence, although equal values no doubt emerged when equal capitals set equal quantities of labor in motion, there need be no necessary connection between the two circumstances, and the values might be equal in quite different cases also. It was not, therefore, the quantity of labor that determined exchangeable value; and Ricardo had mistaken "an accidental coincidence for a necessary connexion." The writer summed up: "Whenever capitals consist of different proportions of raw materials and wages, whenever the rate of wages happens to go higher in one business than in another, whenever capitals are of different degrees of durability, and whenever being of equal durability, the expenditure for wages is different, the value of the products will not be in proportion to the quantity of labour employed on them."¹

McCulloch promptly supplemented his service as expositor by activity as champion.² In the very next issue of the same magazine he undertook to explain that under the term "labour" Ricardo included not only the labor employed on the capital after its accumulation, but the labor employed in actually accumulating capital, "the labour expended in forming the capital." In short, "What is capital but accumulated labour?"³

But McCulloch's explanation was much too limited and

¹ Cf. *Letters of Ricardo to McCulloch*, p. 16.

² "Torrens I understand is to attack my doctrine of value in the next number of the *Edinburgh Magazine*, and in the number following McCulloch is to defend it. It is a friendly contest. These gentlemen have lately met at Edinburgh." (*Letters of Ricardo to Trower*, p. 66.)

³ Cf. *Letters of Ricardo to McCulloch*, p. 16.

unreal to be entirely acceptable to Ricardo. Moreover, Torrens's criticisms were supplemented by similar expressions from other quarters. As early as September, 1817, Malthus had given Ricardo's work a second careful perusal, and had found the measure of value—in Ricardo's phrase—one of "a very few important points on which we materially differ," and had won from him the free admission that the proposed theory of value did not hold good in different countries when profits were different.¹ Similarly, some months later, the outcome of discussions between Lord King, Wishaw, and Malthus, was recorded by Ricardo as agreement that "the measure of value is not what I have represented it to be."²

It is likely that such criticisms strengthened the conviction, present to some extent from the first in Ricardo's mind, that the claim of "embodied labour" to serve as a measure of value must be relative rather than absolute excellence. The demands of his publisher for a second edition of the *Principles of Political Economy and Taxation* opportunely permitted some formal expression to this belief; and, when the book actually appeared early in 1819, the initial chapter "On Value" contained textual changes which, although not vital,³ may, in the light of what had gone before, be regarded as highly significant. The formal break marking the limit of the first statement of the theory of value⁴ had disappeared. The text of the chapter was divided into five sections with italicized summary headings, which, read in sequence, clearly suggest the passing of the prime purpose of the chapter from demonstration of the

¹ *Letters of Ricardo to Malthus*, p. 139.

² *Ibid.*, p. 148. It is to be noted, however, that the point of issue seems to have been not "the measure of value" in the limited sense in which it was speedily coming to be used, but the larger question as to whether natural as well as market values were determined by demand and supply.

³ The edition "has nothing new in it, as I have not had the courage to recast it," wrote Ricardo to Say on January 11, 1820. Cf. *Letters of Ricardo to Malthus*, p. 166.

⁴ See note 2, p. 458, before.

proposition that higher wages do not necessarily mean higher prices to a more accurately qualified statement of the practicability of "embodied labour" as a measure of value. Careful examination of the limited number of changes introduced in the text of the chapter itself confirms this impression, and reveals a visible effort to make the chapter turn thenceforth upon the measure of value rather than upon correlated dicta.¹

It is also interesting to notice that, in direct consequence of Torrens's criticism,² the amended chapter recognized a further exception to the general rule of "embodied labour" as a measure of value, in addition to the two cases noted in the first edition, namely: (a) if the several commodities were produced with the aid of different proportions of fixed and circulating capital; and (b) if the quotas of fixed capitals so employed were of different durability. This third exceptional circumstance was the fact that the circulating capitals might be of unequal durability, that is to say, "the circulating capital may circulate, or be returned to its employer, in very unequal times."³ In such a condition, as where one manufacturer could bring the commodity he produced to market in less than one year, while another could bring his there in three months, the commodity of the first would fall in relative value to the second with every rise of wages and fall of profits.⁴

Ricardo complained to McCulloch, apropos of Torrens's criticism, that he had from the first distinctly stated that value was not regulated solely by quantity of labor, when capitals of unequal durability were employed in produc-

¹ Thus see the last paragraph of page 33 of the first edition, replaced by the last paragraph of page 31 of the second edition; the last paragraph of page 41 of the first edition, replaced by the last paragraph of page 39 of the second edition; and, most noteworthy, the three concluding paragraphs of pages 47-48 of the first edition, reduced by compression and omission to the less prominently placed paragraphs terminating Section V. (pages 39-40 of the second edition).

² *Letters of Ricardo to McCulloch*, p. 14.

³ *Principles* (1819), p. 21.

⁴ *Ibid.*, p. 36.

tion.¹ But, whatever Ricardo's intention may have been, and whether in consequence of Torrens's criticisms or for other reasons, certainly, as far as formal expression is concerned, the second edition of the *Principles* showed an appreciable increase of reserve in the advocacy of "embodied labour" as a universal measure of value.²

It is likely that Torrens made a further contribution to the discussion, possibly a rejoinder to McCulloch's reply, and submitted copies thereof to McCulloch and to Ricardo.³ Of its nature we have no certain knowledge. But Ricardo's comment thereon has come to us, and is further noteworthy evidence of the mental development which the writer was undergoing: "I am more convinced than ever that the great regulator of value is the quantity of labour required to produce the commodity valued. There are many modifications which must be admitted into this doctrine, from the circumstance of the unequal times that commodities require to be brought to market, but this does not invalidate the doctrine itself. I am not satisfied with the explanation which I have given of the principles which regulate value. I wish a more able pen would undertake it. The fault is not in the adequacy of the doctrine to account for all difficulties, but in the adequacy of him who has attempted to explain it."⁴

In the early spring of 1820 appeared Malthus's *Principles of Political Economy*. An entire section (chap. ii., section iv.) was devoted to a vigorous and effective criticism of the adequacy "Of the Labour which a Commodity has cost, considered as a Measure of Exchangeable Value." Even more clearly than Torrens, Malthus emphasized the

¹ *Letters of Ricardo to McCulloch*, p. 14.

² See, for example, *Principles of Political Economy and Taxation* (1819), pp. 39, 40.

³ *Letters of Ricardo to McCulloch*, p. 47. As there suggested, "the paper" may have been Torrens's "Comparative Estimate"; but, on the whole, this seems less probable.

⁴ *Letters of Ricardo to McCulloch*, pp. 47, 48 (December 18, 1819).

impracticability of the labor measure in the case of commodities produced by different proportions of fixed and circulating capital or by identical amounts of capital used for unequal periods of time. To these admitted exceptions to Ricardo's measure he added three new categories, arising respectively from (a) "the quantity of foreign commodities used in manufactures," (b) "the acknowledged effects of taxation," and (c) "the almost universal prevalence of rent in the actual state of all improved countries."¹ Malthus accordingly reached the definite conclusion that the quantity of labor which a commodity has cost in its production is neither a correct measure of relative value at the same time and at the same place nor a measure of real value in exchange in different countries and at different periods.²

Had Malthus, like Torrens, stopped with negative criticism, his position would have been secure. But the positive measure proposed by him in substitution—"a mean between corn and labour"—was as empirical as it was bizarre, and served merely to weaken his prime attack.

No less promptly than upon the occasion of Torrens's criticisms did McCulloch enter the lists in defence of Ricardo's doctrine against Malthus's attack, this time in the columns of the *Scotsman*. With the general tenor of the vindication Ricardo appears to have been content. "You have with your usual ability"—he wrote in acknowledgment—"met Mr. Malthus on what I consider his strongest ground," and then, in pleased acceptance of discipleship, "I assure you that I am highly gratified in having succeeded so well in my imperfect statements, as to engage you in their defence, for I should have no chance of procuring their admission into other people's minds, without your powerful assistance."³

But Ricardo was his own severest critic; and, however

¹ *Principles of Political Economy*, p. 104.

² *Ibid.*, p. 108.

³ *Letters of Ricardo to McCulloch*, p. 63.

satisfactorily McCulloch's formalism might explain away the specific objections of commentators, it failed to restore tranquillity to the author's mind. The cases which had before been recognized as "exceptional" now began to take on co-ordinate importance; and, writing to McCulloch in May, 1820, Ricardo declared: "After the best consideration that I can give to the subject, I think that there are two causes which occasion variations in the relative value of commodities: 1st, the relative quantity of labour required to produce them; 2nd, the relative times that must elapse before the result of such labour can be brought to market. All the questions of fixed capital come under the second rule, which I will endeavour to explain if you should wish it."¹

This first explicit recognition of the co-ordinate influence of production-time in determining relative value—destined to remain thereafter an unsurmountable barrier in Ricardo's mind to the universal validity of the labor measure—made McCulloch fairly "tremble for the ark of his covenant," and we may well conceive the troubled inquiry which came from Edinburgh to London. Ricardo responded with a clear exposition of "the effects which the relative times before commodities can be brought to market have on their prices, or rather on their relative value."² The particular point at issue was the impracticability of Malthus's proposed measure of value rather than the entire accuracy of Ricardo's. Having expressed himself in no uncertain tone upon this matter, Ricardo added with characteristic frankness: "It must be confessed that this subject of value is encompassed with difficulties. I shall be very glad if you succeed in unravelling them, and establish for us a measure of value which shall not be liable to the objections which have been brought against all those hitherto proposed. I sometimes think that if I

¹ *Letters of Ricardo to McCulloch*, p. 65.

² *Ibid.*, p. 69.

were to write the chapter on value again which is my book, I should acknowledge that the relative value of commodities was regulated by two causes instead of by one, namely, by the relative quantity of labour necessary to produce the commodities in question, and by the rate of profit for the time that the capital remained dormant, and until the commodities were brought to market. Perhaps, I should find the difficulties nearly as great in this view of the subject as in that which I have adopted."¹

It is likely that in the detailed *Notes on Malthus*, written in the autumn of 1820, Ricardo fulfilled something of the intention herein expressed. But, yielding to the counsel of McCulloch and Mill to avoid giving his treatise too controversial a character, this commentary was withheld from publication, and the missing manuscript still remains a conspicuous desideratum in the study of Ricardo's mental history.²

By the end of 1820, however, Murray, the publisher, had again begun to clamor for a new edition of the *Principles of Political Economy and Taxation*;³ and Ricardo was enabled to realize in some degree his definitely conceived purpose. The urgency of the printer (the chapter "On Value" forming the first sheets), Ricardo's unwillingness to enlarge the book greatly or to increase its controversial elements,⁴ uncertainty as to the future of the *Notes on Malthus*, and, most of all, the actual existence of a chapter "On Value," resulted in "a few additions to the first chapter," designed "to explain more fully than in the last [edition] my opinion on the difficult subject of VALUE,"⁵ instead of the thoroughgoing reconstruction

¹ *Letters of Ricardo to McCulloch*, pp. 71, 72.

² The *Notes* would have occupied about 150 printed pages, and would probably have appeared as an appendix to the third edition of the *Principles*. Cf. *Letters of Ricardo to Trower*, p. 141.

³ *Letters of Ricardo to McCulloch*, p. 87.

⁴ *Letters of Ricardo to Malthus*, p. 172.

⁵ "Advertisement to the Third Edition" of the *Principles*, ix.

which might have resulted "if I were to write the chapter on value again."¹

But, withal, the chapter "On Value" in the *Principles* of 1821 is in content and tendency very different from that in the original edition of 1817 and a conspicuous though logical advance over that in the edition of 1819. Ricardo's purpose, first and foremost, was no longer to refute the proposition that higher wages were the cause of higher prices, but to show that embodied labor was the most practicable measure of value and that gold was its most serviceable standard expression. The "received doctrines" of Adam Smith and succeeding writers, that a rise in the price of labor would be followed by a rise in the price of all commodities, was disproved by inference rather than in detail; and the compatibility of higher wages and lower prices was relegated to incidental statement.² On the other hand, the exceptions to the universal applicability of "embodied labour" as a measure of value were no longer glossed over as negligible, but described in sequence. Alterations in the rate of profits were recognized as co-ordinate in kind, though not in degree, with "embodied labour" as a determinant of value. Ricardo asserted with a new distinctness that "it would be wrong wholly to omit the consideration of the effect produced" thereby; and if, he added, "it would be equally incorrect to attach much importance to it,"³ it was for the reason that "this cause of the variation of commodities is comparatively slight in its effects."⁴ Thenceforth the prominence of "embodied labour" in Ricardo's treatment of value, to the relative neglect of other influences, was the result of deliberate convention rather than of culpable neglect.⁵

¹ *Letters of Ricardo to McCulloch*, p. 71.

² *Principles* (1821), p. 45.

³ *Ibid.* (1821), p. 33.

⁴ *Ibid.*, p. 32.

⁵ "in the subsequent part of this work, though I shall occasionally refer to this cause of variation [the rate of profits], I shall consider all the great varia-

To both James Mill and McCulloch the modified views of Ricardo appear to have given concern. In the spring of 1821, hard upon the heels of the third edition of Ricardo's *Principles*, appeared Mill's *Elements of Political Economy*, designed, as Ricardo wrote to McCulloch, "to steer clear if possible of the difficult word value."¹ But it was the difficulties of the concept rather than the concept itself which were avoided; for Mill restated the theory of a "labour embodied" measure with absolute, uncompromising rigidity. Beyond admitting that, "In estimating equal quantities of labour, an allowance would, of course, be included for different degrees of hardness and skill,"² he recognized none of the exceptions to the measure which Ricardo described. Capital was merely "*hoarded* labour, that which has been the result of former labour, and either is applied in aid of the immediate labour, or is the subject-matter upon which it is bestowed."³ Three years later Mill took notice of the time element in value measurement, only to deny vigorously its influence.⁴ But in 1821 he could sum up decisively, "It thus appears, by the clearest evidence, that quantity of labour, in the last resort, determines the proportion in which commodities exchange for one another."⁵

Some intimation has already been given of McCulloch's anxiety.⁶ The discussion on value in Ricardo's *Notes on Malthus* appears to have caused further concern,⁷ and Ricardo himself sought by preparatory explanation to soften the blow which he knew would fall with the appear-

tions which take place in the relative value of commodities to be produced by the greater or less quantity of labour which may be required from time to time to produce them." *Principles* (1821), pp. 33-34.

¹ *Letters of Ricardo to McCulloch*, p. 92.

² *Elements of Political Economy* (1821), p. 72.

³ *Ibid.*, p. 75.

⁴ *Ibid.* (2d edition, 1824), p. 95 *et seq.*

⁵ *Ibid.* (1821), p. 74.

⁶ See p. 483, above.

⁷ *Letters of Ricardo to McCulloch*, p. 94

ance of the third edition of the *Principles*.¹ But McCulloch, like Mill, was unyielding, and continued to maintain in his private classes and public lectures in Edinburgh a rigid labor measure.² Early in 1822 he submitted his manuscript notes to Ricardo;³ and, if in the resultant criticism the issue was not emphasized, the difference was none the less clear and substantial.⁴

Parliamentary duties, corn-law agitation, fiscal discussions, and a Continental tour absorbed Ricardo's time and attention during 1822. But early in 1823, probably in consequence of the discussions, in Parliament and out, of the effects of the Bank's resumption of specie payments upon general prices, the subject of value again became of high theoretical interest to the little coterie of economists of which Ricardo had become an important member. At a meeting of the Political Economy Club on February 3, 1823, with Torrens in the chair and with Malthus, Ricardo, Tooke, Mill, and Mushet among those present, a subject of discussion (proposed by Torrens) was, "What are the circumstances which determine the exchangeable value of commodities?"⁵ Two months later debate upon the same

¹ "I have made some alterations in the first chapter 'on value' which I fear from the remarks in your letter will not meet with your approbation. I wish I had sent you the chapter, as it is now printing with the other papers, that I might have profited by your opinion of it, before I had proceeded so far towards its publication. . . . I am not satisfied, as I have often told you, with the account I have given of value, because I do not know exactly where to fix my standard. . . . I have reflected so much upon it that I despair of becoming more enlightened upon it by my own unassisted efforts." *Letters of Ricardo to McCulloch*, pp. 94, 96.

² *Ibid.*, p. 118; cf. also McCulloch, *Discourse on the Rise, Progress, Peculiar Objects, and Importance of Political Economy* (Edinburgh, 1824), p. 66 *et seq.*

³ *Letters of Ricardo to McCulloch*, pp. 128, 132.

⁴ "You go a little farther than I go in estimating the value of commodities by the quantity of labour required to produce them. You appear to admit of no exception or qualification whatever, whereas I am always willing to allow that some of the variations in the relative value of commodities may be referred to causes distinct from the quantity of labour necessary to produce them. . . . To this second cause [variations in wages and profits] I do not attach near so much importance as Mr. Malthus and others, but I cannot wholly shut my eyes to it." *Ibid.*, pp. 131, 132.

⁵ *Minutes and Proceedings, 1821-82*, vol. iv. p. 56. Senior was balloted for and elected a member of the club at this meeting.

topic was resumed;¹ and at a third meeting the related query, "Can there be an increase of Riches without an increase of Value?" was discussed.²

This theoretical debate was supplemented by the appearance early in 1823 of Blake's *Observations on the Expenditure of Government*³ and Malthus's *Measure of Value*,⁴ and a little later by Western's motion in the House of Commons for the appointment of a committee to inquire into the effects of resumption. In each case the questions involved were whether the alteration in prices was due to an appreciation of gold or to a depreciation of paper, and what standard measure afforded the best means of determining this fact.

Of the three circumstances, Malthus's tract came to Ricardo as the most direct challenge. Abandoning his earlier proposal of 1820 of a mean between corn and labor as a measure of value,⁵ and more dissatisfied than ever with Ricardo's proposed measure, Malthus announced his definite adherence to the "labour commanded" theory of Adam Smith. He asserted that relative value was measured by the amount of "accumulated and immediate labour expended on the commodity, together with the ordinary profits estimated upon such advances."⁶ But this composite "must necessarily be the same as the quantity of labour which they will command";⁷ and, since the quantity of labor worked up in a commodity could not in many cases be practically ascertained, whereas the

¹ *Minutes and Proceedings, 1821-82*, vol. iv. p. 57. Sir Henry Parnell presided; and Tooke, Senior, Warburton, James Mill, Grote, Malthus, Ricardo, and J. S. Mill (as a visitor) were present.

² *Ibid.*, p. 59. McCulloch was present as a visitor. This was the last meeting held in Ricardo's lifetime; but the subject of value continued to engage the attention of the club for some time thereafter. Cf. note 5, p. 459, above.

³ *Observations on the Effects Produced by the Expenditure of Government during the Restriction of Cash Payments* (London, 1823).

⁴ *The Measure of Value Stated and Illustrated, with an Application of it to the Alterations in the Value of the English Currency since 1790* (London, 1823).

⁵ *Measure of Value*, p. 23, note.

⁶ *Ibid.*, p. 14.

⁷ *Ibid.*, p. 16.

amount of labor which it would command was evident and palpable, the "commanded labour" theory was at once theoretically sound and practically serviceable.

The animated controversy which continued through the spring and summer of 1823 formed the final episode of Ricardo's scientific life. Long letters relating thereto passed between Ricardo and Malthus, and were summarized or actually transmitted with detailed commentaries to Trower and McCulloch. Mrs. Grote tells of dinners at "Threddle" where Mill, Ricardo, and McCulloch (then visiting London, and later Gatcomb Park) had interminable discussions upon the measure of value.¹ Similarly, Ricardo wrote to Trower that Warburton and Torrens—to say nothing, doubtless, of Blake and Tooke and other members of the group—had "their particular view" as to a proper measure of value.²

In so far as this final contribution of Ricardo to the value controversy possessed any distinctive characteristic, it was the prominence accorded gold as a practical rather than "embodied labour" as an ideal measure of value. This was in part a reflex of contemporary Parliamentary debate, in part a reaction from McCulloch's insistence upon "the mathematical accuracy"³ of the labor measure. As against all of his adversaries, Ricardo continued to assert that an invariable measure of value was unobtainable, and that we can only make "the best choice amongst confessedly imperfect measures."⁴ To McCulloch and Mill he made further answer that a rigid labor measure accounted for variations arising from more or less labor being required to produce commodities, but that it failed with respect to variations brought about by the use of varying proportions of labor and capital. "For these variations," he added, "there has never been, and I think never will be, any perfect measure of value."⁵ To Malthus

¹ Bain, *James Mill*, p. 208.

² *Letters of Ricardo to Trower*, p. 206.

³ *Letters of Ricardo to McCulloch*, p. 174. ⁴ *Ibid.*, p. 177. ⁵ *Ibid.*, p. 173.

he similarly replied that, inasmuch as the great mass of commodities awaiting exchange were produced by the union of labor and capital for a certain length of time rather than by either labor or capital alone, a measure of value such as money, compounded of two elements, wages and profits, was more serviceable for practical purposes than a measure representing wages alone, such as "embodied labour," or profits alone, such as old oak-trees or a pipe of old wine.¹

IV.

It is thus possible to speak with propriety of the "development" of Ricardo's theory of value. Far from being the rigid and definitive exposition which his critics have represented, the concept was distinctly a doctrinal growth, reflecting in its course the characteristic phases of Ricardo's mental history. It is true that the central feature of the theory underwent evolution rather than radical change; but in point of approach, in relative emphasis, and in manner of statement the differences are so conspicuous that, taken in themselves, they perplex and bewilder even the most earnest student, and only when interpreted in the light of the successive conditions and influences which affected Ricardo's scientific life do they become clear and intelligible.

Starting from Adam Smith's exposition, Ricardo's first impulse was to supply the gaps and to perfect the logic of the traditional theory of value. But, before the occasion for written statement had arrived, the practical controversies associated with a debated corn-law policy had absorbed his attention; and the exposition of value which actually appeared was less an abstract contribution than a theoretical warrant for concrete proposals. But, as so often before and since in the history of scientific doctrines,

¹ *Letters of Ricardo to McCulloch*, p. 177.

it was the argument, not the conclusion, which was attacked; and thereafter theoretical interest and contemporary events combined to fix his attention upon a serviceable measure of value rather than upon its essential elements.

It is idle to conjecture to what extent Ricardo, had his life been spared a few years longer, would have penetrated further into the value maze. He had come to a full sense of its intricacy,¹ and had passed beyond the stage of disputation.² Certainly, he would never have remained long quiescent in doctrinal agnosticism. All that we know of his intellectual tenacity and his logical method suggest that he would have forged steadily ahead, ultimately to attain, if not the central truth, at least a station far in advance of his disciples and his critics, and not far removed from that which his most sympathetic interpreters have been inclined to accord him.

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¹ "I am however only labouring in my vocation, and trying to understand the most difficult question in Political Economy. All I have hitherto done is to convince myself more and more of the extreme difficulty of finding an unobjectionable measure of value." *Letters of Ricardo to McCulloch*, pp. 159, 160.

² "And now, my dear Malthus, I have done. Like other disputants, after much discussion we each retain our own opinions. These discussions, however, never influence our friendship; I should not like you more than I do if you agreed in opinion with me." *Letters of Ricardo to Malthus*, p. 240.